

Do Resilience and Social Support Reduce Job Stress? Study on Preschool Teachers

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Abstract

This study aimed to determine whether resilience and social support could predict job stress on preschool teachers. As many as 120 teachers from Yogyakarta participated in this study. Research instruments were presented through an online platform, comprised of: The Brief Resilience Scale, Multidimensional Scale of Perceived Social Support (MPSS), and The Perceived Stress Scale (PSS-10). Using the SPSS 24.0 for Windows program, the collected data were analyzed using multiple linear regression. The results of the regression analysis showed that resilience and social support significantly predicted job stress on preschool teachers. However, the results of a separate analysis showed that only resilience significantly related to preschool teacher's stress. This study indicates that teacher's ability to do internal regulation through stress play a broader role on determining teacher's job stress level. Furthermore, the prevention program to overcome preschool teacher's job stress needs to develop by focusing on strengthen this resilience ability.

Keywords: Resilience, social support, stress, teacher.

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Introduction

Teacher is a central and very crucial profession in the education process. Teaching quality from teachers greatly determines the educational output of students. However, survey results in several countries showed that the teaching profession has the highest vulnerability to psychological stress and other mental health problem (Fathi et al., 2021; Kuwato & Hirano, 2020; Klassen, et al. 2012; Ouellette et al., 2018) Yet the level of job stress that is too high can have a negative impact on work performance. A person's ability to manage stress is significantly negatively related to work performance (Altindag, 2020).

According to Roeser et al. (2013) teacher job stress is defined as the unpleasant negative emotional experience teachers have that can result in excessive physical and mental exhaustion, nervous tension, frustration, or distress. This can be caused by factors such as long working hours, heavy workload, and serious student misconduct. In addition, administrative tasks, parental demands, and unhealthy relationships with co-teachers can also be additional stressors (Kuwanto & Hirano, 2020).

In Indonesia, teachers who have the status of certified teachers also have higher obligations and demands along with increased compensation, such as the increasing number of working hours. This condition causes the lack of time that a teacher should have to take care of their own welfare. In fact, with a high workload and job stress, a teacher needs time to rebalance his stress level. Previous studies have shown that ability to maintain a balance between work time and personal time is an important factor in maintaining one's mental health (Haider, Jabben, & Ahmad, 2018).

In the context of teachers at the primary and early childhood levels, job stress also stems from the high demands of social-emotional competence. In addition, this type of work requires a high level of concentration as well as speed of decision making (Roeser et al., 2013). Based on this understanding, it can be concluded that the causes of mental health problems in the teaching profession come from complex sources. The work environment, teaching context, social expectations, and classroom management may be related to each other and contribute to the formation of teacher job stress.

Symptoms of stress experienced by a teacher include cognitive aspects, affective aspects, physical and interpersonal effects (Rothi, Leavey, & Loewenthal, 2010). In the cognitive aspect, stress symptoms are manifested in cognitive disorders, difficulty concentrating, self-blame, self-doubt, helpless thoughts, excessive worry, and others. In the affective aspect, stress is manifested in affective symptoms such as grumpy, panic, depressed mood, anxiety, anger, feeling overwhelmed, and others. While the symptoms of stress that are manifested in behavior including sleep disorders, eating disorders, agitation, nightmares, aggression, isolation, and others. Regarding the physical aspect, stress is manifested by the appearance of physical complaints such as nausea, dizziness, fatigue, muscle tension, difficulty breathing, hypertension, hormonal problems, and others. Finally, lack of assertiveness, withdrawal, passive-aggressiveness, cynicism, and others are symptoms of teacher

stress which are included in the interpersonal aspect (Rothi, et al., 2010, Travers, 2017).

Job stress faced by teachers also makes teachers vulnerable to burnout conditions. Burnout is a condition of emotional exhaustion and feelings of disconnection, cynicism, and feelings of not getting personal achievement from the work that the individual does. Burnout comes from work-related stress experienced by individuals in high intensity and lasts a long time and (Lazarus & Folkman 1984; Lancu, Rusu, Măroiu, Păcurar, Maricuțoiu, 2017). It is also known as a stress-related problem for professionals that work in interpersonally oriented job like teaching and health care profession (Maslach & Leiter, 2016).

If not handled adequately, job stress can have a negative impact on the teacher concerned or on his work. Teachers whose burnout decreases in teaching quality (Haydon, Leko & Stevens, 2018; Hoglund, Klinge, & Hosan, 2015), unsatisfactory performance and also low commitment (Bagnall, Jones, Akter, Woodall, 2016; Naghie, Montgomery, Bonell, Thompson, Aber, 2015). Burnout is also closely related to increased teacher absenteeism and high turnover rates. This condition is illustrated by the difficulties experienced by teachers in managing their classes effectively and providing adequate classroom instructions (Lancu, et al., 2017; Naghie, et al., 2015). In fact, burnout also causes teachers to be reluctant to provide support in extracurricular matters and tasks other than teaching (Harding, Morris, Gunnell, Ford, Hollingworth, Tilling, et al., 2019).

Specifically, in preschool teachers, high stress levels are related to the level of social, emotional, and behavioral functioning of children. Higher levels of stress in lead teachers tend to apprehend children as having higher levels of anger-aggression and anxiety-withdrawal. On the other hand, assistant teachers' stress level was correlated to teacher-reported children's social competence (Jeon, Buettner, Grant, & Lang, 2018). Study from Friedman-Krauss, Raver Neuspiel, Kinsel (2014) was also revealed the similar result that there is association between burnout and emotional and behavioral problems in children.

The job stress faced by teachers, in addition to having an impact on mental health and also the quality of learning, can also have an impact on the physical health of the teachers themselves. such as the

emergence of health problems of high blood pressure and cardiovascular disease (Harding, et al., 2019; Emerson, Leyland, Hudson, Rowse, Hanley, Hugh-Jones, 2017). If this condition continues without getting serious attention from various parties, the quality of education in Indonesia will be difficult to improve.

Although the teaching profession is very susceptible to experiencing high and chronic job stress compared to other professions (Harding, et al., 2019; Kidger, Brockman, Tilling, Campbell, Ford, Araya, et al., 2016), the mental health of teachers can be pursued by increasing protective factors that function as modulators of stress originating from individual external factors and individual internal factors. One of the factors that come from external to the individual is social support. Social support is information obtained from others in the form of feelings of being loved, respected and appreciated (Taylor, 2012). Based on Wu, Wang, Gao, & Wei (2020), Individual perceptions of social support are attained from the experience of getting appreciation, attention, and respect from other people. Specifically, when individuals are able to reveal their usefulness to others, it will make them feel affirmed that they are loved, needed, and accepted.

The teacher source of support can be from the people within the institution, parents, students, and the community, as well as from outside the school such as family, spouse, friends. The perception of social support that theoretically used in this study was in the form of emotional support, informational support, and instrumental support by Kelly & Northrop (2015). Social support is also one of the most common coping strategies used by teacher when stressful experience happens, explicitly depend on warm relationships with family and friends (Haydon et al., 2018, Richard, 2012). It is also known as one of the variables that directly contribute to child care teacher's job stress (Laily & Muhid, 2021; Myeong-Soo & Jong-Hun, 2017). The role of social support in maintaining the mental health of teachers has been described in several empirical studies of various groups of teachers (Kuwanto & Hirano, 2020; Kidger, Evans, Tilling, Hollingworth, Campbell, Gunnell, 2016; Andrews, McCabe, & Wideman-Johnston, 2014; Nalina, & Sethuramasubbiah, 2017).

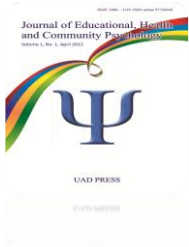
In addition to factors originating from external individuals, individual internal factors are also very important as a protective factor for stress on teachers. Studies related to the level of stress on

teachers have shown evidence that resilience is a form of individual internal coping mechanism that is useful in dealing with excessive stress on teachers and burnout (Diah & Ratna, 2012). Resilience was described as an individual's ability to overcome hardship in a high-risk environment and then grow into an individual who emotionally and socially functioning (Zhang, Bai, & Li, 2020). Resilience has long been seen as a predictor of mental health problems across a wide variety of cross-cultural populations (Hao, Hong, Xu, Zhou, Xie, 2015).

Individuals with high resilience will be able to overcome problems by finding effective solutions without feeling burdened by these problems. This stems from the ability of individuals with high resilience to maintain positive emotions, have optimism, be able to control themselves and have confidence in problem solving (Septiani & Fitria, 2016). The results of previous studies showed that resilience is known to be closely correlated with the level of mental health of a teacher and also clinical symptoms related to the mental health status of teachers such as the emergence of depression, anxiety, and stress (Zhang, Bai, & Li, 2020; Ratanasiripong, China, Ratanasiripong, & Toyama, 2020).

To the best of the researchers' knowledge, research focusing on preschool teacher stress predictors related to psychological variables had not much conducted in Indonesia. No research has yet been discussed perceived social support and resilience as predictor of job stress in preschool teacher. Leading research focused on several variables including the relationship between job stress and achievement motivation (Nafiah & Laksmiwati, 2016), stress management (Esita & Rohmiati, 2016; Handayani, Sirait, Faridha, 2021), psychological well-being and self-efficacy (Maharani & Wati, 2021). Thus, the purpose of this study is to measure how social support and resilience can be predictors of stress for preschool teachers. The research questions posed in this study are first, how do social support and resilience contribute to preschool teacher stress levels? Second, which of these variables serves as the strongest predictor of preschool teacher stress levels? Based on the research questions, the hypotheses proposed in this study are:

- Social support and resilience can simultaneously predict preschool teacher stress.
- Social support has a negative effect on the stress level of preschool teachers. The higher the social support received by the teacher, the lower the teacher's stress level, and vice versa.



- Resilience has a negative effect on the stress level of preschool teachers. The higher the level of teacher resilience, the lower the stress level, and vice versa

Method

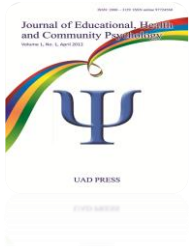
Research Design

This research is quantitative research with a cross-sectional survey research design. Cross-sectional correlation research is a study that emphasizes the time of measurement or observation of independent and dependent variable data only once at a time to determine the correlative relationship between these variables (Leedy, & Ormrod, 2015).

Participants

The target population of this research was Early Childhood Education and Development (ECED) teachers in the Special Region of Yogyakarta who have taught for at least 2 years. In addition, the criteria were also set that the teachers involved in this study must have active status as teachers or in the sense that they are not on leave or sick. A total of 120 preschool teachers were involved in this study that set from a minimum of 107 required. This minimum number of sample was calculated using the a priori sample size formula from Soper for multiple regression analysis (Soper, 2018), in order to achieve an effect size of .15, probability level .01, power level .85, and the number of predictors as many as 2 variables. Data collection was performed by cluster random sampling. Sample frame was set from four districts and one city in Yogyakarta. Then from each region 3 schools were randomly selected as a sampling cluster so that the total sample came from 15 schools. The number of samples obtained was total 120 people.

Before the research data were collected, the teacher would read detailed information related to this research and state the willingness to become a research participant by filling out the informed consent which was presented online on the start page of the research scale. Participation in this study was voluntary, but researchers would give rewards in the form of e-money randomly to 20 participants. This procedure is in accordance with the research ethics contained in the ethical clearance of this research with the protocol number KE/1065/10/2021 at the Ethics Commission of the Faculty of



Medicine Gadjah Mada University.

Measurement

The data collection instrument in this study is a self-report questionnaire, in the form of previously validated scales that were utilized to measure social support, resilience, and job stress. At the beginning of the research scale, demographic data were obtained through personal information sheets that revealed age, gender, last education, employment status, type of school, and average working hours. Meanwhile, the scale of social support, resilience, and job stress would use an instrument that had been adapted into Indonesian or an instrument that would be translated back and forth to get a valid Indonesian version. This translational version would be provided to an expert panel consisting of researchers, clinical psychologists, and linguists. The validation results from these experts would be utilized as considerations in the preparation of the final version of the instrument used in the data collection process.

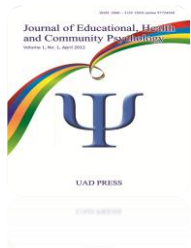
Social support would be measured using the Multidimensional Scale of Perceived Social Support - MSPSS that had already translated and validated in Bahasa Indonesia by Ekawati, Setyowati, & Budiati (2019). Based on the trial scale on 60 samples, the reliability coefficient of Cronbach alpha on this Indonesian version of MSPSS was 0.935. It consists of 12 question items which response options ranged from 1 (completely disagree) to 7 (strongly agree). The score reflect that the higher total score, the stronger social support someone received and vice versa. Some of Indonesian version of MSPSS's items are "*Ada orang yang istimewa di sekitar saya ketika saya membutuhkannya*", "*Keluarga saya benar-benar mencoba untuk membantu saya*", "*Saya dapat mengandalkan teman – teman saya ketika ada masalah*".

Resilience would be measured using The Brief Resilience Scale-BRS (Smith et al.,2008). There were 6 items on this scale with a Likert scale ranging from 1-5. The higher the score, the higher the level of resilience which consists of 6 items. This scale is a Likert scale with scores ranging from 1-5. The higher the score indicates the higher the level of resilience, and vice versa. The researchers translated original version of BRS into Indonesian. The back-translation method was used to generate a valid Indonesian translation, which was compared to the original English text for discrepancies. A expert

panel was asked to evaluate the accuracy of the content of the translated version. The panel consisted of three researchers, one psychologist with health psychologist research expertise, and a sworn translator. The researchers validated the content validity of the scales using qualitative methods by completing the checklist and improving the translation of every item in the scales until saturation was reached. Some of Indonesian version of BRS items are “*Saya merasa sulit melewati masa yang penuh tekanan*“, “*Saya biasanya melewati masa sulit dengan mudah*“, “*Saya cenderung memerlukan waktu yang lama untuk mengatasi kemunduran dalam hidup*”. Result of the trial scale testing on 60 samples showed that the reliability coefficient of Cronbach alpha on BRS was 0.730.

Meanwhile, the level of job stress would be measured using The Perceived Stress Scale (PSS-10) (Cohen et al., 1983) which is a psychological instrument that is widely used to measure individual perceptions of stress. This scale is widely used in studies measuring stressful situations, the effectiveness of stress reduction programs, and the correlation of stress with psychological and physical disorders. The items on this scale are designed to reveal how uncontrollable, unpredictable, and excessive participants perceive their daily life during the past month. The researchers were also translated original version of PSS-10 into Indonesian in the same steps that had been applied before in BRS. Some items of Indonesian version of PSS-10 are “*Anda merasa terganggu karena ada hal-hal yang terjadi secara tidak terduga?*“, “*Anda merasa gugup atau tertekan?*“, “*Anda merasa bahwa kesulitan terasa semakin menjadi-jadi hingga anda tidak sanggup mengatasinya?*”. A total of 10 items in the PSS provided answer choices with scores from 0 (never) to 4 (very often). Based on the results of the trial scale on 60 samples, the reliability coefficient of Cronbach alpha on PSS-10 was 0.770.

Based on all trial scale testing, it can be concluded that the reliability for the PSS-10, BRS, and MSPSS scales showed internal consistency within acceptable limits because it was already above the 0.60 level (Cortina, 2013). To ensure data reliability, the questionnaire could only be filled out once by each participant, with different instructions in each section. In addition, researchers also carried out a data checking process so that no data were entered more than once.



Data Analysis

Obtained data from all instruments utilized in this study would be analyzed using SPSS software version 24. Predictors of teacher job stress would be analyzed using multiple regression analysis (Cohen, Cohen, West, & Aiken, 2003). Beforehand, the assumption test was carried out, namely: residual normality test, linearity test, multi-collinearity test, and heteroscedasticity test

Result

Based on the results of the demographic analysis of the subjects involved in this study, the description of the characteristics of the subjects of this study is as follows:

Table I.

Demographic characteristic

Variable	Category	Number	Percentage (%)
Age	20-30 years	30	25,2%
	30-40 years	28	23%
	40-50 years	37	30,5%
	>50 years	25	21,3%
Gender	Male	32	26,9%
	Female	88	73,1%
Last Education	D3 (Diploma 3)	3	2,3%
	S1 (Bachelor)	106	88,5%
	S2 (Master)	11	8,9%
Teaching Institution	Islamic Kindergarten	18	14,7%
	Kindergarten	78	64,9%
	Playgroup	10	8,5%
	Daycare	14	11,8%
Work Experience	2-5 years	36	29,8%
	6-10 years	13	11,1%
	10-15 years	18	14,8%
	>15 years	53	44,3%

Before testing the hypothesis with the technique of multiple regression analysis, there were several assumptions that need to be met first, namely normality test, linearity test, multi-collinearity test, and heteroscedasticity test. The residual normality test with the Kolmogorov-Smirnov test showed a significance value of 2 tailed $p=0.98 > 0.50$ which means that the data were normally distributed. The linearity test showed that the deviation from linearity value of the social support variable is $p=0.74 > 0.50$, which means the variable is linear. Furthermore, the resilience variable data showed that the deviation of linearity value is $p = 0.78 > 0.50$. The results of the linearity test of each predictor variable in this study on the stress variable showed linear results. The results of the multicollinearity test showed the tolerance value for the social support variable = $0.74 > 0.10$, which means that there is no multicollinearity. As for the resilience variable, the tolerance value = $0.923 > 0.10$, which also means that there is no multicollinearity in this variable. Heteroscedasticity in the variables involved in this study was carried out by the Glejser test and follow-up scatterplot images. In the social support variable, heteroscedasticity symptoms were found ($p=0.028 < 0.05$), but in the resilience variable there were no heteroscedasticity symptoms or in the sense that there was homoscedasticity ($p=0.479 > 0.05$). However, after observing the scatterplot, no particular pattern was found or in the sense that the data were randomly distributed so that it can be said that the heteroscedasticity symptom did not occur in the two variables involved in this study.

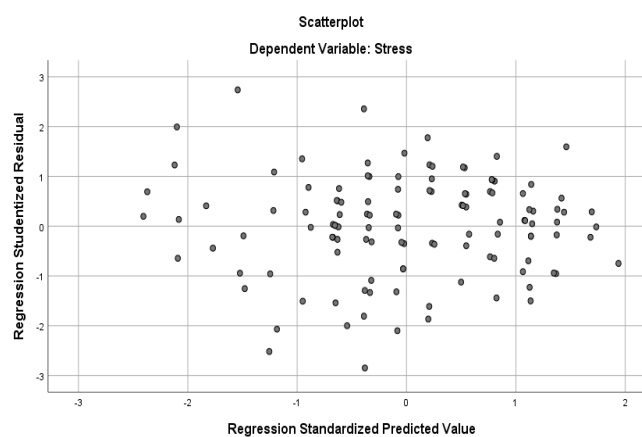


Figure 1. Scatterplot of homoscedasticity assumption

After testing the assumptions, the research hypotheses were tested. The results of the research hypothesis test showed the following results:

Hypothesis 1

Hypothesis 1 of this study is "Social support and resilience can simultaneously predict teacher stress." The results of multiple linear regression analysis with the entry model in table 2 confirmed that the hypothesis can be accepted that simultaneously social support and resilience can predict teacher stress significantly ($F= 57.158, p= 0.000 < 0.05$). The effective contribution of social support and resilience variables simultaneously to teacher stress was 49.4% ($R \text{ Squared} = 0.494, R = 0.703, p = 0.000 < 0.05$) which can be seen in table 3.

Table 2.

Multiple Regression Hypothesis Test Result

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1732.396	2	866.198	57.158	0.000
Residual	17773.071	117	15.154		
Total	3505467	119			

Table 3.

Hypothesis Test Results Between Variable (Simultaneous)

Model	R	R Squared	Adjusted R Squared	Std. Error of the Estimates
1	0.703	0.494	0.486	3.89287

Hypothesis 2

Furthermore, the second hypothesis of this study is "Social support has a negative effect on teacher stress levels". The higher the score of social support received by the teacher, the lower the stress level of the teacher, and vice versa. Based on the results of the analysis individually, it is known that social support does not significantly affect negatively the teacher's stress level ($t=-0.307, p= 0.759 > 0.05$). In detail the results of the analysis are presented in table 4.

Table 4.

Hypothesis Test Results of Partial Inter-Variable Influence

Model	Unstandardized Coefficient		Standardized Coefficient		
	B	Std Error	B	β	sig
Social Support	-.011	.036	-.021	-.307	.759
Resilience	-1.101	.108	-.697	-10.182	.000

Hypothesis 3

The third hypothesis of this study is “Resilient has a negative effect on teacher stress levels”. The higher the level of teacher resilience, the lower the stress level, and vice versa. Based on the results of the analysis individually, it was found that resilience had a negative effect on teacher stress levels significantly ($t=-10,182$, $p= 0.000 <0.05$) as presented in table 4. Effective contribution (EC) of resilience on teacher’s job stress was calculated by this formula $[EC(X)\% = \beta_{\text{resilience}} \times r_{xy} \times 100\%]$ which showed that the result was 48,99%.

Discussion

Mental health problems in teachers have become a serious problem in many countries compared to other professions (Kuwato & Hirano, 2020; Pennsylvania State Uni, 2017; Zimmerman, et al., 2012). Even the teaching profession is categorized as a high-stress occupation (Fathi et al., 2021; Kuwato & Hirano, 2020; Klassen, et al. 2012; Ouellette et al., 2018). In the context of teachers of the primary and early childhood education levels, job stress stems largely from the high demands of social-emotional competence and high concentration of work characteristics as well as speed of decision making (Roeser, et al., 2013).

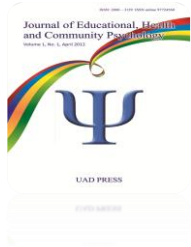
The purpose of this study was to determine whether social support and resilience can predict teacher’s job stress. The results of the analysis showed that simultaneously social support and resilience can predict teacher stress ($F= 57.158$, $p= 0.000 < 0.05$). The results of this study are in line with the results of previous studies which state that social support and resilience are good predictors

of individual stress levels (Daniilidou, Platsidou, & Gonida, 2020; Sippel, Pietrzak, Charney, Mayes, & Southwick, 2015). The effective contribution of social support and resilience variables simultaneously to teacher stress was 49.4% ($R^2 = 0.494$, $R = 0.703$, $p = 0.000 < 0.05$). While the other 50.6% is a contribution from other variables that are not examined in this study and also research error.

However, based on the results of a partial analysis in this study, it was found that social support did not significantly affect negatively the teacher's stress level ($t = -0.307$, $p = 0.759 > 0.05$). This result did not in line with the previous study that claimed social support was the significant predictor of teacher's job stress (Laily & Muhid, 2021; Myeong-Soo & Jong-Hun, 2017). Only when working simultaneously with resilience, social support was able to influence the stress level of teachers. When examined in more depth, social support had an effect on stress by first encouraging the emergence of resilience to stress (Kuwanto & Hirano, 2020). In other words, social support does not directly contribute to teacher's job stress but it is causally related to self-efficacy and resilience (Sari et al., 2016; Park et al., 2020).

Besides, the source of social support itself are significant to teacher's job stress (Fiorilli et al., 2019). The job stress that perceived by teacher in general mostly comes from this our main sources which are related to teacher's teaching role such as school organizations, job demands, work resources, and social-emotional competence of the teacher in managing stress (Pennsylvania State Uni, 2017). So, the internal source of social support on teacher such as from workplace relationship are more effective on teacher burnout than external context support (Fiorilli et al., 2019) such as from administrative leadership (Buchanan, Prescott, Schuck, Aubusson, & Burke, 2013) and fellow teachers (Kelly & Northrop, 2015). Social support can play a dismissing role in teacher's job stress only when the support fulfils teacher psychological needs and improves their sense of control (Zhou & You, 2020).

Moreover, social support variable seems to be strongly related to cultural characteristics (Shavitt, Cho, Johnson, Jiang, Holbrook, & Stavrakantonaki, 2016). In the context of collectivistic societies such as Indonesia and Asian society in general, there are norms that emphasize the strength of control or efforts to suppress one's emotional expression (Ruby, Falk, Heine, Villa, & Silberstein, 2012) to



maintain harmony in a relationship (Taylor, Sherman, Kim, Jarcho, Takagi, & Dunagan, 2004). In this context, social support not always act as a stress reducer like general assumption understood so far but sometimes actually it can cause stress instead. For example, when someone expresses stress and the various stressors he faces to the closest person, it can be considered a violation of normality that can disrupt the harmonious relationship that has been established. As a result, social support can sometimes cause psychological stress in the context of Asian society (Mojaverian & Kim, 2013; Wang & Lau 2015).

Furthermore, it seems that in the context of teacher's job stress, stress can be predicted more strongly by internal personality characteristics not by external factors such as social support. If we refer to Lazarus & Folkman (1984) stress theory, the nature of stress is depend on someone appraisal about his own resources to overcome stress. It reflects that stress itself is more affected by someone internal personality factor so this can be the reason why social support variable cannot be significant predictor of teacher's job stress.

However, confirmed by individual analysis, resilience has a negative effect on teacher's job stress levels significantly ($t = -10,182, p = 0.000 < 0.05$). It means that an increase in resilience scores will be followed by a decrease in teacher stress scores and vice versa. The effective contribution of resilience on teacher's job stress was 48,99%, the rest was about uninvestigated variables and errors. These results are in line with previous studies which stated similar results that resilience is closely related to stress levels (Park et al., 2020; Sari et al., 2016).

A resilient teacher has lower levels of job stress and tends to be more successful in dealing with stressful situations. In addition, teacher resilience can predict teacher resistance to stress (Richards, Levesque-Bristol, Templin, & Graber, 2016). Teacher resilience can arise when teachers are able to adapt positively from challenging situations. Resilience to stress reflects a person's capacity to adapt successfully in the face of acute stress, trauma, or more chronic forms of adversity. Resilience is an active process, not just a condition of absence of psychopathology and can be pursued by increasing potential protective factors (Reich, Zautra, Hall, 2012).

According to Gu (2014), the growth of teacher resilience depends on a specific context, with a specific role, and is closely related to commitment and feelings of equality. The specific context in question is for example the level of support provided by school leaders, and support and positive feedback from students' parents. In this case, supportive relationships will help teachers survive and thrive in their teaching assignments and when interacting with students (Arcelay-Rojas, 2019).

Lastly, this research was carried out during the covid-19 pandemic so all the school was implementing distance learning. This policy resulted need of arrangement in data collection strategy so it decided to carry out using the google form and administered by online. This administration made a limitation so that researchers were not able to know how the situation and conditions when the teacher worked on the questionnaires. Further research which wants to replicate this research or conduct research related to the variables and subjects studied in this study is advised to see if there are also differences in scores with different data collection methods. Differences in methods of data collection have the potential to have an effect on scores although their validity and reliability are not affected (Chang, 2005).

All in all, this research has succeeded in answering how the ability of social support and resilience in predicting teacher stress. It was also found that social support when working independently could not significantly predict teacher stress. Further studies need to examine more deeply how measure the relationship between the variables of stress, resilience, social support, and other variables with structural equations in order to obtain a more rigid and comprehensive correlation model.

Conclusions

The results of the regression analysis showed that resilience and social support significantly predicted stress on preschool teachers. However, the results of a separate analysis showed that only resilience significantly related to preschool teacher's stress. This research result indicates an urgency to develop a prevention program aimed to overcome preschool teacher's stress by focusing on strengthen the resilience ability. Further research that wants to replicate this research advises to compared the score with different data collection method and also explores more comprehensively how social support, resilience, and preschool teacher's stress work together with Structural Equations Modeling.

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References

- Altindag, O.(2020). Relationship between stress management and job performance in organization. *International Journal of Research in Business and Social Science*, 9 (2), 43-49. DOI:10.20525/ijrbs.v9i2.636.
- Andrews, A., McCabe, M., & Wideman-Johnston, T. (2014). Mental health issues in the schools: Are educators prepared? *The Journal of Mental Health Training, Education, and Practice*, 9(4), 261-272. doi:http://dx.doi.org/10.1108/JMHTEP-11-2013-0034.
- Arcelay-Rojas, Y, A., (2019). Exploring puerto rican preservice teachers resilience: A focus group study. *Journal of educational research and practice*, (9)1, 369-385. DOI: 10.5590/JERAP.2019.09.1.26.
- Bagnall, A., Jones, R., Akter, H., Woodall, J.. (2016). *Interventions to prevent burnout in high risk individuals: Evidence review*. London: Public Health England.
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., & Burke, P. (2013). Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education*, 38(3), 112-129.
- Chang, T. (2005). The Validity and reliability of student ratings: Comparison between paper-pencil and online survey. *Jurnal Psikologi Cina*, 47(2), 113-125. DOI : 10.6129/CJP.2005.4702.02.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.)*. New York: Routledge.
- Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.
- Cortina, J. M. (2013). What is coefficient alpha? An examination of theory and applications. *Journal of applied psychology*, 78(1), 98.
- Daniilidou, A., Platsidou, M., & Gonida, E. (2020). Primary school teachers' resilience: Association with teacher self-efficacy, burnout and stress. *Electronic Journal of Research in Educational Psychology*, 18(3), 549-582. http://dx.doi.org/10.25115/ejrep.v18i52.3487.
- Diah, R., Pratna, P. (2012). Resiliensi guru di sekolah terpencil. *Jurnal psikologi pendidikan dan perkembangan*, 2(1).
- Ekawati, E., Setyowati, S., Budiati T. (2019). "Sehati" health education to improve physical and psychological adaptation of the postpartum women having pre-eclampsia. *Enfermería Clínica*, 29(2), 199-204. DOI : https://doi.org/10.1016/j.enfcli.2019.04.054
- Emerson, L., Leyland, A., Hudson, K., Rowse, G., Hanley, P., Hugh-Jones, S. (2017). Teaching mindfulness to teachers: A systematic review and narrative synthesis. *Mindfulness*, 8(5): 1136–1149.
- Esita, Z. & Rohmiati, R. (2016). Stress dan manajemen stress guru pada ataman kanak-kanak di kota kendari. *Jurnal Riset Aktual Psikologi*, 7(2). DOI : https://doi.org/10.24036/rapun.v7i2.102627
- Fathi, J. Greenier, V., & Derakhsan, A. (2021). Self-efficacy, reflection, and burnout among Iranian EFL teachers : the mediating role of emotion regulation. *Iran . J. Lang. Teach. Res*, 9, 13-37. DOI : 10.30466/IJLTR.2021.121043.

- Fiorilli, C., Benevene, P., De Stasio, S., Buonomo, I., Romano, L., Pepe, A., & Addimando, L. (2019). Teachers' burnout: the role of trait emotional intelligence and social support. *Frontiers in Psychology, 10*. doi:10.3389/fpsyg.2019.02743.
- Friedman-Krauss AH, Raver CC, Neuspiel JM, Kinsel J. (2014). Child behavior problems, teacher executive functions, and teacher stress in head start classrooms. *Early Education and Development, 25*(5):681–702. doi: 10.1080/10409289.2013.825190.
- Gu, Q. (2014). The role of relational resilience in teachers' career-long commitment and effectiveness. *Teacher and Teaching, 20*, 502-529. DOI: 10.1080/13540602.2014.937961.
- Haider, S., Jabeen, S, & Ahmad, J. (2018). Moderated mediation between work life balance and employee job performance: The role of psychological wellbeing and satisfaction with coworkers. *Journal of Work and Organizational Psychology, 34*, 29-37. <https://doi.org/10.5093/jwop2018a411>.
- Handayani, A. T., Sirait, D., & Faridha, F. (2021). Menejemen stress di kalangan guru TK pada masa pandemic covid-19 di TK Jannat Al-Baqi Medan. *Prosiding Seminar Nasional Hasil Pengabdian, 4*(1), 23-28.
- Hao SW, Hong W, Xu HH, Zhou LL, Xie ZY. (2015). Relationship between resilience, stress and burnout among civil servants in Beijing, China: Mediating and moderating effect analysis. *Pers Individ Differ, 83*, 65-71. doi: 10.1016/j.paid.2015.03.048.
- Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., et al. (2019). Is teachers' mental health and wellbeing associated with students' mental health and wellbeing? *Journal of Affective Disorders, 242*, 180–187.
- Haydon, T., Leko, M, M., & Stevens, D. (2018). Teachers stress: sources, effects, and protective factors. *Journal of Special Education Leadership, 31* (2), 99-107.
- Hoglund, W. L. G., Klinge, K. E., & Hosan, N. E. (2015). Classroom risks and resources: Teacher burnout, classroom quality and children's adjustment in high needs elementary schools. *Journal of School Psychology, 53*(5), 337-357.
- Jeon, L., Buettner, C. K., Grant, A. A., & Lang, S. N. (2018). Early childhood teachers' stress and children's social, emotional, and behavioral functioning. *Journal of Applied Developmental Psychology, 61*(6), 1-12. doi:10.1016/j.appdev.2018.02.002
- Kelly, S., & Northrop, L. (2015). Early career outcomes for the "Best and the Brightest": Selectivity, satisfaction, and attrition in the beginning teacher longitudinal survey. *American Educational Research Journal, 1*-31. doi:10.3102/0002831215587352.
- Kidger, J., Brockman, R., Tilling, K., Campbell, R., Ford, T., Araya, R., et al. (2016). Teachers' wellbeing and depressive symptoms, and associated risk factors: A large cross sectional study in English secondary schools. *Journal of Affective Disorders, 192*, 76–82.
- Kidger, J., Evans, R., Tilling, K., Hollingworth, W., Campbell, R., Ford, T., Gunnell, D. (2016). Protocol for a cluster randomised controlled trial of an intervention to improve the mental health support and training available to secondary school teachers – the WISE (wellbeing in secondary education) study. *BMC Public Health, 16*(1). doi:http://dx.doi.org/10.1186/s12889-016-3756-8.
- Klassen, R., Wilson, E., Siu, Angela, F, Y., Hannok, W., Wong, Marina, W., Wongsri, N., Sonthisap, P., Pibluhol, C., Buranachitavee, Y., Jansem, A. (2012). Preservice teachers' job stress, self-efficacy, and occupational commitment in four countries. *European Journal of Psychology Education, 28*, 1289–1309. DOI 10.1007/s10212-012-0166-x.
- Kuwato, M., & Hirano, Y. (2020). Sense of coherence, occupational stressors, and mental health among Japanese high school teacher in Nagasaki Prefecture: a multiple regression analysis. *BMC Public Health, 20*, 1355. <https://doi.org/10.1186/s12889-020-09475-x> 2.

- Laily, N. & Muhid, A. (2021). Social support as predictors of reducing work stress on early childhood education teacher. *Journal of Early Childhood Care and Education*, 4 (2), 54-62.
- Lancu, A., E., Rusu, A., Măroiu, C., Păcurar, R., Maricuțoiu, L., P. (2017). The effectiveness of interventions aimed at reducing teacher burnout: A meta-analysis. *Educational Psychology Review*, 30(2), 1–24.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Leedy, P. D., & Ormrod, J. E., (2015). *Practical research: Planning and design 11th Edition*. New York: Pearson.
- Maharani, E. A. & Wati, D. E. (2021). Peran psychological well-being dan efikasi diri terhadap stress pada guru PAUD. *Intuisi Jurnal Psikologi Ilmiah*, 13(1), 1-14. DOI: 10.15294/intuisi.v13i1.28690.
- Maslach, C.; Leiter, M.P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15, 103–111.
- Mojaverian, T., & Kim, H. S. (2013). Interpreting a helping hand: Cultural variation in the effectiveness of solicited and unsolicited social support. *Personality and Social Psychology Bulletin*, 39, 88-99. doi:10.1177/0146167212465319.
- Myeong-Soo, K. & Jong-Hun, L. (2017). Structural relationship between social support, job stress, and child care teachers' burnout. *Journal Of The Korea Convergence Society*, 8(10), 281-294.
- Nafiah, M. N. & Laksmiwati, H. (2016). Motivasi berprestasi dengan stress kerja pada guru taman kanak-kanak. *Jurnal Psikologi Teori dan Terapan*, 6(2), 71-77. DOI : <https://doi.org/10.26740/jptt.v6n2.p71-77>.
- Naghieh, A., Montgomery, P., Bonell, C. P., Thompson, M., Aber, J. L. (2015). Organisational interventions for improving wellbeing and reducing work-related stress in teachers. *Cochrane Database of Systematic Review*, 4. Art. No.: CD010306.
- Nalina, B. & Sethuramasubbiah. (2017). Social support and mental health among married women teachers. *International Journal of Development Research*, 7, (08), 14437-14443.
- Ouellete, R. R., Frazier, S. L., Shernoff, E. S., Cappella, E., Mehta, T. G., Marinez-Lora, A., et al. (2018). Teacher job stress and satisfaction in urban schools : disentangling individual, classroom, and organizational-level influences. *Behav. Ther.*, 49, 494-508. DOI : 10.1016/j.beth.2017.11.011.
- Park, Nam-Shim., Seung-Min Song., & Jung Eun Kim (2020). The mediating effect of childcare teachers' resilience on the relationship between social support in the workplace and their self-care. *International Journal of Environmental Research and Public Health*, 17(22), 8513. doi:<http://dx.doi.org/10.3390/ijerph17228513>
- Pennsylvania State Uni. (2017). Teacher stress and health : effects on teachers, students, and schools. *Issue Briefs*, 1-12. Available online at <https://www.prevention.psu.edu>.
- Ratanasiripong, P., China, T., Ratanasiripong, N. T., & Toyama, S. (2020). Resiliency and mental health of school teachers in okinawa. *Journal of Health Research*, 35(6), 470–481.
- Reich, J. W., Zautra, A. J., Hall, J. S. (2012). *Handbook of Adult Resilience*. New York: Guilford Press.
- Richards, K. A. R., Levesque-Bristol, C., Templin, T. J., & Graber, K. C. (2016). The impact of resilience on role stressors and burnout in elementary and secondary teachers. *Social Psychology of Education: An International Journal*, 19(3), 511–536. <https://doi.org/10.1007/s11218-016-9346-x>.
- Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., Harrison, J. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, waitlist-control field trials. *Journal of Educational Psychology*, 105(3), 787-804.

- Rothi, D., Leavey, G., & Loewenthal, K. (2010). Teachers' mental health : A study exploring the experiences of teachers with work-related stress and mental health problems. *Research report for NASUWT*. ISBN 978-1-906611-13-2.
- Ruby, M. B., Falk, C. F., Heine, S. J., Villa, C., & Silberstein, O. (2012). Not all collectivisms are equal: Opposing preferences for ideal affect between East Asians and Mexicans. *Emotion*, 12, 1206-1209. doi:10.1037/a0029118.
- Sari, S. M., Lestari, Y. I., & Yulianti, A., (2016). Hubungan antara social support dan self-efficacy dengan stress pada ibu rumah tangga yang berpendidikan tinggi. *PSYMPATHIC: Jurnal Ilmiah Psikologi*, 3(2), 171-178. DOI: 10.15575/psy.v3i2.1108.
- Septiani, T & Fitria, N. (2016). Hubungan antara resiliensi dengan stress pada mahasiswa sekolah tinggi kedinasan. *Jurnal penelitian psikologi*. 7(2) 59-76.
- Shavitt, S., Cho, Y. I., Johnson, T. P., Jiang, D., Holbrook, A., & Stavrakantonaki, M. (2016). Culture moderates the relation between perceived stress, social support, and mental and physical health. *Journal of Cross-Cultural Psychology*, 47(7), 956–980. doi:10.1177/0022022116656132.
- Sippel, L. M., R. H. Pietrzak, D. S. Charney, L. C. Mayes, and S. M. Southwick. (2015). How does social support enhance resilience in the trauma-exposed individual? *Ecology and Society*, 20(4),10. <http://dx.doi.org/10.5751/ES-07832-200410>.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 15(3), 194-200.
- Soper, D. S. (2018). *A-priori Sample Size Calculator for Hierarchical Multiple Regression* [Software]. <http://www.danielsoper.com/statcalc>.
- Taylor, S.E. (2012). *Health psychology*. New York: Mc Graw-Hill.
- Travers, C. (2017). Current knowledge on the nature, prevalence, sources and potential impact of teacher stress. *Educator Stress*, 23–54. doi:10.1007/978-3-319-53053-6_2.
- Wang, S. W., & Lau, A. S. (2015). Mutual and non-mutual social support: Cultural differences in the psychological, behavioral, and biological effects of support seeking. *Journal of Cross-Cultural Psychology*, 46, 916-929. doi:10.1177/0022022115592967.
- Wu, T.-J., Wang, L.-Y., Gao, J.-Y., & Wei, A.-P. (2020). Social support and well-Being of chinese special education teachers—an emotional labor perspective. *International Journal of Environmental Research and Public Health*, 17(18), 6884. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/ijerph17186884>.
- Zhang, M., Bai, Y., & Li, Z. (2020). Effect of resilience on the mental health of special education teachers: moderating effect of teaching barriers. *Psychology Research and Behavior Management*, 13, 537–544. doi:10.2147/prbm.s257842.
- Zimmerman, L., Unterbrink, T., Pfeifer, R., Wirsching, M., Rose, U., Stobel, U., Buhl-Grießhaber, V. Frommhold, M., Schaarschmidt, U., Bauer, J. (2012). Mental health and patterns of work-related coping behaviour in a German sample of student teachers: a cross-sectional study. *Int Arch Occup Environ Health*. 85:865–876. DOI 10.1007/s00420-011-0731-7.